ANSWER 8 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1961:81882 CAPLUS DOCUMENT NUMBER: 55:81882 ORIGINAL REFERENCE NO.: 55:15546b-e Secosteroids TITLE: INVENTOR(S): Lettre, Hans; Pfirrmann, Rolf PATENT ASSIGNEE(S): Farbenfabriken Bayer Akt.-Ges. DOCUMENT TYPE: Patent Unavailable LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. KIND DATE DATE PATENT NO. 19600707 DE 1958-F26110 19580708 DE 1084718 3B-Hydroxy- or -acyloxy-5,6-secocholestan-5-on-6-al phenylhydrazones or the corresponding derivs. of other 5(6)-unsatd. sterols were reduced, the 3-OH group optionally set free, and the resulting amines substituted or quaternized to give the title compds., useful, as pharmaceuticals. Thus, 1 g. 3β -acetoxy-5,6-secocholestan-5-on-6-al phenylhydrazone (I). in 150 cc. glacial AcOH was reduced with 6 moles H in the presence of Pt (from 50 mg. PtO2), the catalyst filtered off, and the filtrate worked up conveniently to give 3β -acetoxy-5,6-seco-5-hydroxycholestane-6ammonium acetate (IIa), m. 198° (decomposition). The free amine (II) gave the following derivs.: N-benzoyl derivative m. 262°; benzylidene derivative m. 245-6°. II on saponification with methanolic KOH at room temperature gave 5,6-seco-3β,5-dihydroxy-6-aminocholestane; benzylidene derivative 231°. I (0.2 g.) reduced by LiAlH4, in 50 cc. Et2O gave 5,6-seco-3β,5-dihydroxycholestan-6-al phenylhydrazone, m. 203-4° (MeOH), λ 270 m μ , which on catalytical reduction gave amorphous 5,6-seco-3β,5-dihydroxy-6-aminocholestane. I (1.3 g.) in 100 cc. EtOAc reduced with 1 mole H in the presence of Pt (from 50 mg. PtO2) gave 3β-acetoxy-5,6-seco-5-hydroxycholestan-6-al phenylhydrazone, m. 194°, λ 270 m μ , which on further reduction under the same conditions gave II. IIa (1 g.) in 20 cc. 85% HCO2H heated 2 hrs. with 2 cc. aqueous 40% CH2O, the mixture concentrated, the residue taken up in dilute NaOH, extracted with Et2O, the extract washed, dried, and concentrated gave 5,6-seco-3β,5-dihydroxy-6-dimethylaminocholestane (III), m. 172° (EtOAc); HCl salt m. 280-3° (MeOH-EtOAc). III (0.2 g.) in Et2O and excess MeI kept 4 weeks at room temperature gave 5,6-seco-3eta, 5-dihydroxycholestane-6-trimethylammonium iodide, m. 194° (EtOAc). 103400-87-9 109214-52-0 TΤ (Derived from data in the 6th Collective Formula Index (1957-1961)) 103400-87-9 CAPLUS RN 1,3-Cyclohexanediol, 4-[4-(2-benzylideneaminoethyl)-1-(1,5-CNdimethylhexyl)hexahydro-7a-methyl-5-indanyl]-4-methyl-, acetate (6CI) INDEX NAME) CM 1 103400-86-8 CRN C34 H55 N O2 CMF

HO
$$CH_2-CH_2-N$$
 $CH-Ph$

Me $CH-(CH_2)_3-CHMe_2$

Me

CM 2

CRN 64-19-7 CMF C2 H4 O2

RN 109214-52-0 CAPLUS CN 5,6-Secocholestane-3 β ,5-diol, 6-amino-, 3-acetate, compd. with AcOH (6CI) (CA INDEX NAME)

CM 1

CRN 109214-51-9 CMF C29 H53 N O3

Absolute stereochemistry.

CM 2

CRN 64-19-7 CMF C2 H4 O2

IT 103099-54-3, 1,3-Cyclohexanediol, 4-[4-(2-aminoethyl)-1-(1,5-

RN

CN

dimethylhexyl)hexahydro-7a-methyl-5-indanyl]-4-methyl (and derivs.)
103099-54-3 CAPLUS
5,6-Secocholestane-3β,5-diol, 6-amino- (6CI) (CA INDEX NAME)

HO
$$CH_2-CH_2-NH_2$$

Me $CH-(CH_2)_3-CHMe_2$

Me Me

IT 103400-86-8P, 1,3-Cyclohexanediol, 4-[4-(2-benzylideneaminoethyl)-1-(1,5-dimethylhexyl)hexahydro-7a-methyl-5-indanyl]-4-methyl-105520-54-5P, 5,6-Secocholestane-3β,5-diol, 6-dimethylamino-105520-55-6P, 1,3-Cyclohexanediol, 4-[4-(2-dimethylaminoethyl)-1-(1,5-dimethylhexyl)hexahydro-7a-methyl-5-indanyl]-4-methyl-, hydrochloride 119300-63-9P, Benzamide, N-[2-[5-(2,4-dihydroxy-1methylcyclohexyl) -1-(1,5-dimethylhexyl) -hexahydro-7a-methyl-4-indanyl] ethyl]-, 4-acetate 119300-64-0P, 1,3-Cyclohexanediol, 4-[4-(2-benzylideneaminoethyl)-1-(1,5-dimethylhexyl)hexahydro-7a-methyl-5indanyl]-4-methyl-, 1-acetate 122426-28-2P, 5,6-Secocholestane-3β,5-diol, 6-dimethylamino-, methiodide RL: PREP (Preparation) (preparation of) RN 103400-86-8 CAPLUS 5,6-Secoergostane-1,3-diol, 6-[(phenylmethylene)amino]-, CN (CA INDEX NAME) $(3\alpha, 10\alpha) - (9CI)$

HO
$$CH_2-CH_2-N$$
 $CH-Ph$

Me $CH-(CH_2)_3-CHMe_2$

Me

RN 105520-54-5 CAPLUS CN 5,6-Secocholestane-3 β ,5 β -diol, 6-dimethylamino- (6CI) (CA INDEX NAME)

Absolute stereochemistry.

° RN 105520-55-6 CAPLUS CN 5,6-Secocholestane-3 β ,5 β -diol, 6-dimethylamino-, hydrochloride (6CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 119300-63-9 CAPLUS
CN 5,6-Secocholestane-3β,5-diol, 6-benzamido-, 3-acetate (6CI) (CA
INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

Double bond geometry as shown.

RN 122426-28-2 CAPLUS

CN 5,6-Secocholestane-3β,5-diol, 6-dimethylamino-, methiodide (6CI) (CA INDEX NAME)

HO
$$CH_2-CH_2-N+Me_3$$
 Me $CH-(CH_2)_3-CHMe_2$
 Me

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